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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/623,682	07/21/2003	Joseph A. King	5783	5313
7590	01/05/2006			EXAMINER
Carl L. Johnson Jacobson And Johnson Suite 285 One West Water Street St. Paul, MN 55107-2080			TSOY, ELENA	
			ART UNIT	PAPER NUMBER
			1762	
DATE MAILED: 01/05/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/623,682	KING ET AL.	
	Examiner Elena Tsoy	Art Unit 1762	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 07 November 2005.

2a) This action is FINAL.                    2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 8-20 is/are pending in the application.

4a) Of the above claim(s) 11 and 13-20 is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 8-10 and 12 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)                    4) Interview Summary (PTO-413)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)                    Paper No(s)/Mail Date. \_\_\_\_\_.  
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_.

5) Notice of Informal Patent Application (PTO-152)  
 6) Other: \_\_\_\_\_.

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***Response to Amendment***

1. Amendment filed on 11/07/2005 has been entered. Claims 8-20 are pending in the application. Claims 11, and 13-20 are withdrawn from consideration as directed to a non-elected invention.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 8, 9 stand rejected under 35 U.S.C. 102(b) as being anticipated by KR 8902848 and Minami (US 3,866,568) or Takahashi et al (US 5,567,539) for the reasons of record set forth in paragraph 8 of the Office Action mailed on 6/28/2005.

5. Claims 8-10 stand rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over JP 780100390 for the reasons of record set forth in paragraph 9 of the Office Action mailed on 6/28/2005.

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6. Claims 8, 9 stand rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over JP 78020780 for the reasons of record set forth in paragraph 10 of the Office Action mailed on 6/28/2005.

7. Claims 8, 9 stand rejected under 35 U.S.C. 103(a) as being unpatentable over KR 8902848 in view of Oehler et al (US 5,820,927) for the reasons of record set forth in paragraph 11 of the Office Action mailed on 6/28/2005.

8. Claims 8-10, 12 stand rejected under 35 U.S.C. 103(a) as being unpatentable over KR 8902848/JP 780100390/JP 78020780 in view of Rosenblatt (US 6,365,169) for the reasons of record set forth in paragraph 12 of the Office Action mailed on 6/28/2005.

9. Claim 10 stands rejected under 35 U.S.C. 102(b) as anticipated by JP 78020780 for the reasons of record set forth in paragraph 13 of the Office Action mailed on 6/28/2005.

***Response to Arguments***

10. Applicants' arguments filed 11/07/2005 have been fully considered but they are not persuasive.

(A) Applicants argue that the references of Minami and Takahashi et al. each do not teach the step of applying metal ion yielding materials in particle form to an adhesive on a web. The reference KR 8902848 also does not teach the step of applying of metal ion yielding material in particle form to the adhesive. It is noted that a review of the copy of the reference KR 8902848 obtained from the Office revealed that reference KR 8902848 fails to teach the application of silver active carbon and untreated active carbon to an adhesive. To the contrary, the Applicant respectfully submits that KR 8902848's disclosure of: "... filling between two ...

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permeable nonwoven fabrics (coated with adhesive on the inner side only) with silver-added active carbon ... and untreated active carbon by alternating the silver-added active carbon and untreated carbon in repetition; in repeating ..." (emphasis added.) teaches away from the step of "applying a metal ion yielding material in particle form to the adhesive."

The Examiner respectfully disagrees with this argument. In contrast to Applicants argument, both copies of the translated text of KR 8902848 (obtained from the Applicants and the Office) show that KR 8902848 teaches that one side of the non-woven fabric 11' and 11'' (i.e. either upper side 11' or lower side 11'') is coated with an adhesive, and the adhesive-coated side is fusion bonded to silver-added activated carbon 12' or un-treated 12'' (See e.g. Translation obtained from the Applicants, page 4, lines 20-21). KR 8902848 teaches also that the silver-added activated carbon 12' and un-treated 12'' are alternately arranged between upper and lower non-woven fabrics 11' and 11''. Therefore, KR 8902848 includes teaching that one side of the non-woven fabric 11' and 11'' is fusion bonded to the silver-added activated carbon 12' because KR 8902848 does not limit its teaching to bonding only untreated cabon.

Each of Minami and Takahashi et al is applied not for teaching the step of applying metal ion yielding materials in particle form to an adhesive on a web, but to show that the word "dry" may also be applied to fused adhesives.

(B) Applicants argue that: (i) JP 78020780 does not call for the drying of JP 78020780's binder in order to adhere JP 78020780's sintered powder to JP 78020780's base plate; (ii) JP 78020780 does not teach applying the water treatment material to the adhesive on said solid structure.

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The Examiner respectfully disagrees with this argument. As to (i), JP 78020780 discloses a sterilizing element for water purification apparatus (claimed filter) comprising adhering a water-insoluble silver salt containing powder to a flexible film with a epoxy resin binder (See Abstract). It is well known in the art that *resins* can be formulated either as water based or as solvent based. In both cases the epoxy resin binder should be dried to secure powder to the plate. The specification as filed also describes the use of **epoxy resin** as an adhesive, which supposed to be dried to secure metal ion yielding particles (See page 6, line 9).

The Examiner Note: adhesive of any kind should be dried (cooled, cured), as evidenced by JP 51067462 (See Abstract) or solvent removing to secure an object to a substrate.

As to (ii), there are only two possible ways to adhere powder to a plate using adhesive: (1) to apply powder to the coated adhesive or (2) mix the powder with the adhesive and then apply the mixture to the plate.

(C) The Applicant submits that the reference JP 78010390 does not teach claimed limitation "... forming the particle containing web into an article for use in water purification." JP 78010390 does not teach claimed resin.

The Examiner respectfully disagrees with this argument. JP 78010390 expressly teaches sterilizing element for **water purification** (See title). The Examiner agrees that the abstract of JP 78010390 does not teach resin of claim 10.

(D) The Applicant submits that Rosenblatt does not call for the drying or the curing of his PVA with the iodine applied thereto in order to secure the iodine to Rosenblatt's substrate.

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The Examiner respectfully disagrees with this argument. Rosenblatt teaches *curing* (setting) of his PVA with the iodine and other antimicrobial components in order to secure the iodine and other antimicrobial components to Rosenblatt's substrate (See column 8, lines 9).

***Conclusion***

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elena Tsoy whose telephone number is 571-272-1429. The examiner can normally be reached on Monday-Thursday, 9:00AM - 7:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Elena Tsoy  
Primary Examiner  
Art Unit 1762

ELENA TSOY  
PRIMARY EXAMINER  
*E.Tsoy*

December 28, 2005